

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐

APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER Wild Horse 1-11							
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT WILDCAT							
4. TYPE OF WELL Gas Well <input type="checkbox"/> Coalbed Methane Well: NO <input type="checkbox"/>						5. UNIT or COMMUNITIZATION AGREEMENT NAME							
6. NAME OF OPERATOR VANTAGE ENERGY UINTA LLC						7. OPERATOR PHONE 303 386-8600							
8. ADDRESS OF OPERATOR 116 Inverness Drive East, Ste 107, Englewood , CO, 80112						9. OPERATOR E-MAIL john.moran@vantageenergy.com							
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU78211			11. MINERAL OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>							
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')							
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')							
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>							
20. LOCATION OF WELL		FOOTAGES		QTR-QTR		SECTION		TOWNSHIP		RANGE		MERIDIAN	
LOCATION AT SURFACE		1613 FNL 2333 FEL		SWNE		11		6.0 S		6.0 W		S	
Top of Uppermost Producing Zone		1613 FNL 2333 FEL		SWNE		11		6.0 S		6.0 W		S	
At Total Depth		1613 FNL 2333 FEL		SWNE		11		6.0 S		6.0 W		S	
21. COUNTY UINTAH			22. DISTANCE TO NEAREST LEASE LINE (Feet) 6893			23. NUMBER OF ACRES IN DRILLING UNIT 40							
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completion) 8905			26. PROPOSED DEPTH MD: 6300 TVD: 6300							
27. ELEVATION - GROUND LEVEL 8363			28. BOND NUMBER UTU000288			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 49-1501							
Hole, Casing, and Cement Information													
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight			
Cond	24	16											
Surf	12.25	8.625	0 - 500	24.0	J-55 ST&C	0.0	Class G	370	1.15	15.8			
Prod	7.875	5.5	0 - 6300	15.5	J-55 LT&C	9.2	Type V	88	3.82	11.0			
							50/50 Poz	505	1.26	14.2			
ATTACHMENTS													
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES													
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER						<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN							
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)						<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER							
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)						<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP							
NAME David F. Banko				TITLE Permit Agent				PHONE 303 820-4480					
SIGNATURE				DATE 03/13/2012				EMAIL david@banko1.com					
API NUMBER ASSIGNED 43047524370000				APPROVAL									

Received: March 14, 2012

Vantage Energy Uinta LLC
Wild Horse 1-11
1,613' FNL 2,333' FEL (SW/4 NE/4)
Sec. 11 T6S R6W
Duchesne County, Utah
Surface: Federal
Federal Mineral Lease: UTU78211
Sowers Canyon Unit: UTU86334X

NINE POINT DRILLING PROGRAM

(All drilling procedures will comply with BLM *Onshore Oil and Gas Orders 1 and 2*)

Vantage Energy Uinta LLC respectfully requests that all information regarding this well be kept confidential.

This Application for Permit to Drill (APD) is being filed under the APD process as stated per Onshore Order No. 1 (OSO #1) and supporting Bureau of Land Management (BLM) documents.

THIS APD ALSO SERVES AS THE NOTICE OF STAKING PER OSO #1.

A) GEOLOGIC MARKERS

Anticipated tops of geologic markers are indicated in **Table 1**

Table 1: Estimated Tops of Geologic Markers

Formation	Vertical Depth	Subsea Depth	Description
Uinta			Surface
Green River	363'	8,000'	Sandstone/siltstone/shale
Mahogany Shale	2,103'	6,260'	Oil Shale
Garden Gulch	2,513'	5,850'	Sand and Siltstone
Douglas Creek	3,958'	4,405'	Sandstone/siltstone/shale
L. Douglas Creek	4,318'	4,045'	Sandstone/siltstone/shale
Castle Peak	4,708'	3,655'	Sandstone/siltstone/shale
Uteland Butte	5,343'	3,020'	Carbonate/shale/sandstone
Wasatch	5,553'	2,810'	Shale/Sandstone
Total Depth	6,300'	2,063'	TD ± 750' into Wasatch

Surface Elevation: 8,363.1' (Ground)

B) DEPTHS OF WATER AND MINERAL-BEARING ZONES

Potential water-bearing zones in the vicinity include the Wasatch and Green River formations (Robson and Banta, 1995. *Ground Water Atlas of the United States Segment 2*, Hydrologic Investigations Atlas 730-C, U.S. Geological Survey, Reston, VA). A review of data from the Utah Division of Water Rights indicates no permitted water wells within a one mile radius of the proposed location. Utah Division of Oil, Gas, and Mining surface casing depth requirements will protect potential aquifers in the area.

The depths to potential water and/or mineral-bearing zones are indicated in **Table 2**.

Table 2: Principal Anticipated Water and Mineral-bearing Zones

Formation	Measured Depth	Subsea	Potential Contents
Uinta			Surface / Water
Green River	363'	8,000'	Water
Mahogany Shale	2,113'	6,260'	Water
Garden Gulch	2,513'	5,850'	Oil / Gas
Douglas Creek	3,958'	4,405'	Oil / Gas
L. Douglas Creek	4,318'	4,045'	Oil / Gas
Castle Peak	4,708'	3,655'	Oil / Gas
Uteland Butte	5,343'	3,020'	Oil / Gas
Wasatch	5,553'	2,810'	Oil / Gas

C) MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL EQUIPMENT

The maximum anticipated surface pressure for this well is calculated to be **1,342 psi**. Therefore, rules for a 2,000 psi rated BOP and choke manifold system are applicable. A diagram of the proposed 2,000 psi rated BOP stack configuration is shown in **Fig. 1**.

BOPs and choke manifold will be installed and pressure tested before drilling out from under surface casing (subsequent pressure tests will be performed whenever pressure seals are broken) and then will be checked daily as to mechanical operating condition. BOPs will be pressure tested at least once every 30 days. The annular preventer, pipe rams, and blind rams will be activated on each trip and Operator will conduct weekly BOP drills with the rig crew.

Ram type preventers and related pressure control equipment will be pressure tested to rated working pressure of the stack assembly if a test plug is used. If a plug is not used, the stack assembly will be tested to the rated working pressure of the stack assembly or to 70% of the minimum internal yield of the casing, whichever is less. **Please see variance request at end of program for this section.**

Annular type preventers will be pressure tested to 50% of their rated working pressure. A Sundry Notice (Form 3160~5), along with a copy of BOP test report, shall be submitted to the USFS/BLM within 5 working days following the test. All casings strings will be pressure tested to 0.22 psi/ft or 1,500 psig, whichever is greater, not to exceed 70% of internal yield. **Please see variance request at end of program for this section.**

Casing shoe will be tested by drilling out from below the shoe and testing to the maximum expected mud weight as discussed in the mud program specifications below. Both manual and remote closing mechanisms will be installed on the BOP stack and will be readily available to the driller.

Statement on Accumulator System and Location of Hydraulic Controls

The drilling rig has not yet been selected for this well. Selection will take place after approval of this application. Manual and/or hydraulic controls will be in compliance with *Onshore Oil and Gas Order No. 2 (OSO #2)* for 2,000 psi systems. Regardless of the rig selected, the rig's

accumulator system shall have sufficient capacity to close all BOPs and retain 200 psi above precharge. The proposed pressure control equipment will meet or exceed standards specified in the Order OSO #2.

D) CASING PROGRAM

Casing of quality equal to or better than that indicated in **Table 3 and Table 4** will be used for this well. Actual casing used will be dependent on availability.

Table 3: Proposed Casing Program

Depth (MD)	Hole Diameter	Casing Diameter	Casing Weight and Grade
0 – ± 50'	24"	16"	Optional Conductor – Only if Required
0 – 500'	12-1/4"	8-5/8"	24# J55 ST&C, API New Pipe
0 – 6,300'	7-7/8"	5-1/2"	15.5# J/K-55 LT&C, API New Pipe

Table 4: Proposed Casing Specifications and Design Safety Factors

Size	Collapse (psi)	Burst (psi)	Body Strength (1,000 lbs.)	Joint Strength (1,000 lbs.)	Thread	*Safety Factors		
						Burst Design (1.2)	Collapse Design (1.0)	Tension Design (1.4)
16"	NA – 0.129" wall structural and to seal shallow gravels to allow air drilling surface hole				Weld	NA	NA	NA
8-5/8" 24# J55	1,370	2,950	381	244	ST&C	1.40	3.33	1.50
5-1/2" 15.5# J55	1,640	4,810	248	217	LT&C	1.25	1.48	1.28

***Safety Factor Calculation Assumptions:**

Surface Casing:

Burst Load: Assumes greater of MASP (maximum anticipated surface pressure) exposure during a worse case kick scenario while drilling at total depth, with mud/gas mixture whose gradient is 0.22 psi/ft. OR, minimum required casing test pressure.

MASP

$$\begin{aligned}\text{Load} &= (\text{Formation Gradient} - 0.22 \text{ psi/ft}) * \text{Total Depth, TVD} \\ &= (0.433 \text{ psi/ft} - 0.22 \text{ psi/ft}) * 6,300 \text{ ft.} \\ &= 1,342 \text{ psi}\end{aligned}$$

TEST PRESSURE

$$\text{Load} = \text{Greater of } 1500 \text{ psig or } 0.70 * 2950 = 2065 \text{ psig or MASP} = 1342 \text{ psig}$$

$$\text{SF Burst} = 2,950 \text{ psi} / 2,065 \text{ psi} = 1.4$$

Collapse Load: Assumes worse case loading of evacuated casing during cementing process.

Cement density = 15.8 ppg

Load = $15.8 \text{ ppg} * 0.052 * 500 \text{ ft}$
= 411 psi

SF Collapse = 1370 psi / 411 psi = 3.33

Tension Load: Assumes air weight at total depth + 100,000 lbs overpull design factor.

Load = $(24 \text{ lbs/ft} * 500 \text{ ft}) + 100,000 \text{ lbs overpull}$
= 62,000 lbs

SF Tension = 244,000 lbs / 162,000 lbs = 1.50

Production Casing

Burst Load: Assumes maximum load applied during the hydraulic fracture stimulations. It is Vantage Energy's policy not to exceed 80% rating of the production casing during the stimulation treatment. The 80% rating factor will also be the casing test pressure.

Load = $4810 \text{ psi} * 0.80$
= 3848 psi

SF Burst = 4810 psi / 3848 psi = 1.25

Collapse Load: Assumes worse case loading applied during the production cycle, with evacuated casing, and normally pressured formation gradient applied externally.

Load = $0.433 \text{ psi/ft} * 6,300 \text{ ft}$
= 2728 psi

SF Collapse = 4040 psi / 2728 psi = 1.48

Tension Load: Assumes buoyed weight of casing at total depth + 85,000 lbs overpull design factor.

Load = $[15.5 \text{ lbs/ft} * 6300 \text{ ft} * ((65.5 - 9.2) / 65.5)] + 85,000 \text{ lbs}$
= 83,934 lbs + 85,000 lbs
= 168,934 lbs

SF Tension = 217,000 lbs / 168,934 lbs = 1.28

E) CEMENT PROGRAM

Table 5: Proposed Cement Program

Depth	Hole Diameter	Casing Diameter	Cement
0' – ± 50'	24"	16"	Optional structural conductor if required: Grout with approximately 4 cubic yards of redi-mix back to surface (includes 100% excess) TOC: Surface (Top-off per visual observation)
0' – 500'	12-1/4"	8-5/8"	Surface Casing: Single System (500' – Surface) + 40' Shoe Joint 370 sks "Class G" + 2% CaCl ₂ + 1/4 lb/sk celloflake. Density: 15.8 ppg Yield: 1.15 cuft/sk Water: 5.00 gal/sk Excess: 100% TOC: Surface (Top-off per visual observation)
0' - 6,300'	7-7/8"	5-1/2"	Production Casing: Lead and Tail System Lead System (3,500' – 2,000') 88 sks Type "V" + 16% Gel + 10 lbs/sk gilsonite + 3% Salt + 1/4 lb/sk celloflake Density: 11.0 ppg Yield: 3.82 cuft/sk Water: 23.0 gal/sk *Excess: 30% Tail System (6,300' – 3,500') + 40' Shoe Joint 505 sks 50:50 (Class G:Poz) + 2% gel + 10% salt + 1/4 lb/sk celloflake Density: 14.2 ppg Yield: 1.26 cuft/sk Water: 5.75 gal/sk *Excess: 30%

*Note: The production hole cement volume will be adjusted after running open hole logs, using the caliper hole volume + 15% excess factor.

F) MUD PROGRAM

The mud program for the proposed well is indicated in **Table 6**.

Table 6: Proposed Mud Program

Interval (feet)	Mud Weight (lbs/gallon)	Viscosity (secs/qt)	Fluid Loss (ccs/30 min)	Mud Type
0 – ± 50'	NA	NA	NA	NA
Set optional 14" conductor with bucket rig				
50' - 500'±	NA	NA	N/C	Air/Mist
Run/cement 9 5/8" surface casing				
500'± - TD	8.6 – 9.2	28 - 42	< 10	KCL Water / PHPA / DAP
Run Logs – Run/cement 4 1/2" production casing				

Surface Hole Comments: Spud with “spudder rig” and air drill surface hole misting as may be required to assist with cuttings removal. Report any water encountered to the appropriate agencies. **Please see variance requests for this section.**

Production Hole Comments: Dump spud mud to reserve pit. Drill out surface casing with fresh water adding 6 ppb DAP (Diammonium Phosphate) for shale inhibition and corrosion control. Circulate the reserve pit and flocculate out drill solids. Use pre-hydrated gel and PHPA polymer mud sweeps to assist with hole cleaning. At approximately 3,600' “mud up” and “close in” the fluid system to a 2-3% KCL base fluid. Use PHPA PAC and lignite for filtration control. Maintain fluid system through potential production zones to TD. Should seepage losses be experienced, control with LCM sweeps consisting of calcium carbonate, sawdust, cedar fiber, or mica.

Sufficient mud materials will be maintained on location to adequately maintain mud properties and contain any well kicks. Monitoring equipment will be installed on site to detect changes in mud volume.

G) LOGGING, CORING, AND TESTING PROGRAM

The proposed logging program is indicated in **Table 7**.

Table 7: Proposed Logging Program

Log Suites	Depth Range	Remarks
DIL-SP-LD-CN-GR	Surface Casing to TD + GR to surface	Standard "triple combo" equivalent with resistivity-spontaneous potential, litho-density, compensated neutron, gamma ray, and caliper
Dipole Sonic	± 3,500' to TD	Optional – Operator's discretion Rock property data
Rotary Sidewall Cores	± 3,500' to TD	Optional – Operator's discretion PP/Lithology data (perm-porosity)

No coring or drill stem tests are planned. Mud logging unit will be operational from 200 feet above the Douglas Creek through total depth. Cuttings will be sampled every 20-30 feet.

Prospective zones from the Douglas Creek formation through total depth will be perforated, tested, and potentially acid-washed. It is anticipated that multi-stage hydraulic fracture stimulations of the reservoir will be required.

H) ANTICIPATED PRESSURES AND HAZARDS

No abnormal pressures are anticipated. Pressure gradient in the Green River and Wasatch sequence is expected to be sub-normal pressured to less than 0.433 psi/ft, and then transition to slightly over pressure in the Price River sequence.

Estimated BHP Douglas Creek (3,958')	1,714 psi
Estimated BHP Wasatch (5,553')	2,404 psi
Estimated BHP Total Depth (6,300')	2,728 psi
Hydrostatic head of gas/mud	0.22 psi/ft.
Maximum design surface pressure	$0.433 - 0.22 \text{ psi/ft} \times 6,300 \text{ ft} = \mathbf{1,342 \text{ psi}}$

No H2S zones are anticipated. No abnormal lost circulation zones are anticipated.

J) OTHER INFORMATION

Contact Information and Personnel

Mailing Address

Vantage Energy Uinta LLC
116 Inverness Drive, Suite 107
Englewood, CO 80112
Main Number: 303-386-8600
Fax Number: 303-386-8700

Primary Contact: Seth Urruty

Office Direct: 303-386-8623
Fax Direct: 303-386-8723
Mobile: 303-815-7678
E-Mail: Seth.Urruty@VantageEnergy.com

Drilling Operations: John Moran

Office Direct: 303-386-8610
Fax Direct: 303-386-8710
Mobile: 303-249-2234
E-Mail: John.Moran@VantageEnergy.com

Completion/Production Operations: Eric Burkhalter

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Fax Direct: 303-386-8721
Mobile: 817-480-5227
E-Mail: Eric.Burkhalter@VantageEnergy.com

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E-Mail: Karen.Wagner@VantageEnergy.com

Landman: Michael Holland
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Fax Direct: 303-386-8738
Mobile: 303-396-3443
E-Mail: Michael.Holland@VantageEnergy.com

START DATE AND DURATION OF ACTIVITIES

Anticipated start date

The drilling operations will commence as soon as possible following contracting of drilling rig and in compliance with restrictions imposed by lease stipulations and/or Conditions of Approval. It is therefore anticipated the access upgrade work and location work would commence on or about August 1, 2012, with a target spud date of August 15, 2012. It is anticipated the drilling phase will require 25 days.

Completion

The well pad will be of sufficient size to accommodate all required completion equipment and activities. It is anticipated select intervals will be perforated, stimulated and adequately tested for the presence of commercial hydrocarbons prior to moving uphole to the next prospective test interval. As such, it is anticipated the completion phase will require 45 - 60 days.

The total project duration is therefore estimated to be **70 - 85 days**, and therefore anticipated to be concluded on or about November 10, 2012.

A string of 2-3/8" inch 4.7 lb/ft. N-80 tubing would be run as the production tubing. A Sundry Notice will be submitted should there be any changes to the proposed completion program.

VARIANCE REQUESTS

1. Operator requests a variance to *Onshore Oil and Gas Order 2, Item B, No. 1h*, regulations requiring the surface casing be tested to the greater of 1500 psig, or 70% of the minimum internal yield.
 - a. The MASP for this well is calculated to be 1,342 psig, while the 70% yield rating for the 8-5/8" 24 ppf surface casing is 2,065 psig.
 - b. Operator therefore requests approval to test the surface casing to the lesser value of 1,500 psig, which is greater than the MASP value.
2. Operator requests a variance to *Onshore Oil and Gas Order 2, Item A*, regulations which outline test pressures for 3M pressure control systems.
 - a. The drilling contractor's standard well control equipment inventory will consist of 3M pressure control systems; however, as cited above, the MASP for this well is calculated to be 1,342 psig. As such, 2M pressure control equipment is sufficient pressure rating to safely drill this well.

- b. Operator therefore requests approval to test contractor's 3M BOPE to 2M pressure system standards. The double ram preventer will be tested to 2,000 psig, and the annular preventer will be tested to 1,500 psig. Safety valves and choke/kill lines will be tested to 2,000 psig.
3. Operator requests a variance to *Onshore Oil and Gas Order 2, Item E*, regulations for air/gas drilling operations. Operator plans to drill the surface hole to a depth of 500', with a "spud rig", in a separate operation from the drilling rig. No hydrocarbons are present in the surface hole section and therefore, "gas" drilling is not applicable to this hole section. Therefore, for the purpose only of drilling the surface hole with an air rig, Operator requests the following four (4) variances from the order that states "...the following equipment shall be in place and operational during air/gas drilling: (1) properly lubricated and maintained rotating head; (2) blooie line discharge one hundred feet (100') from wellbore; (3) automatic igniter or continuous pilot light on the blooie line; and (4) compressor located...a minimum of 100 feet (100') from the wellbore".
- a. Operator requests approval to use a diverter bowl rather than a rotating head as specified in the Order. The diverter bowl forces air and cuttings to the reserve pit and is only used to drill the surface hole (to a total depth of 500'). The surface hole section is non-hydrocarbon bearing, and therefore formation pressures will not require a pressure rated rotating head. Should water flows be encountered, they will be reported to the appropriate agencies.
 - b. Operator requests approval to use a blooie line with a discharge length of less than the required one hundred feet (100') from the wellbore in order to minimize the well pad size, and to direct the cuttings into the reserve pit. The wellbore is to be located approximately thirty-five feet (35') from the reserve pit which is to be seventy feet (70') wide. Therefore, a one hundred foot (100') blooie line would blow cuttings across the reserve pit. The requested length of blooie line to drill the surface hole is thirty-five feet (35'). This is the distance necessary to reach the edge of the reserve pit, and to therefore direct cuttings into the reserve pit in a safe and efficient manner.
 - c. Operator requests approval to operate without an automatic igniter or continuous pilot light on the blooie line. The surface hole section is non-hydrocarbon bearing and therefore does not require a continuous ignition source.

Operator requests approval to use a trailer mounted air compressor located less than one hundred feet (100') from the wellbore in order to minimize the location size. The compressor will be located fifty feet (50') from the wellbore in an opposite direction of the blooie line. The compressor has the following safety features: (1) shut-off valve on the trailer located approximately fifteen feet (15') from the air rig; (2) pressure relief valve on the compressor; and (3) spark arrestors on the motors. The compressor will only be used for the drilling of the surface hole, which is non-hydrocarbon bearing.

Figure 1: Pressure Control Schematic

Vantage Energy Uinta LLC

Wild Horse 11-1

1,613' FNL 2,333' FEL (SW/4 NE/4)

Sec. 11 T6S R6W

Duchesne County, Utah

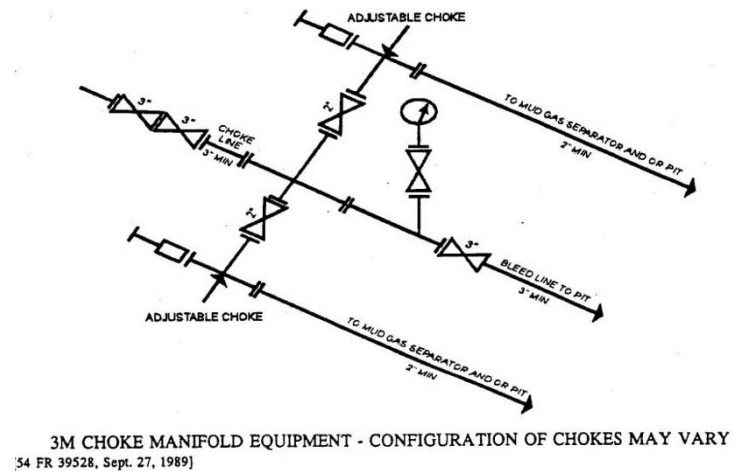
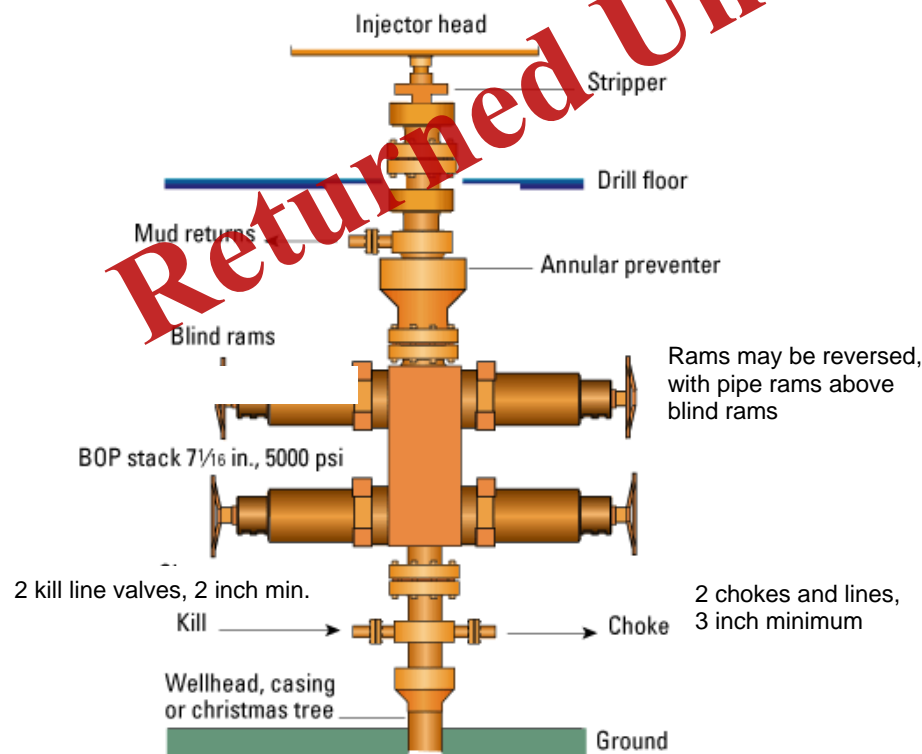
Surface: Federal

Federal Mineral Lease: UTU8211

Sowers Canyon Unit: UTU86334X

Generalized Setup for 2,000 psi Working Pressure System

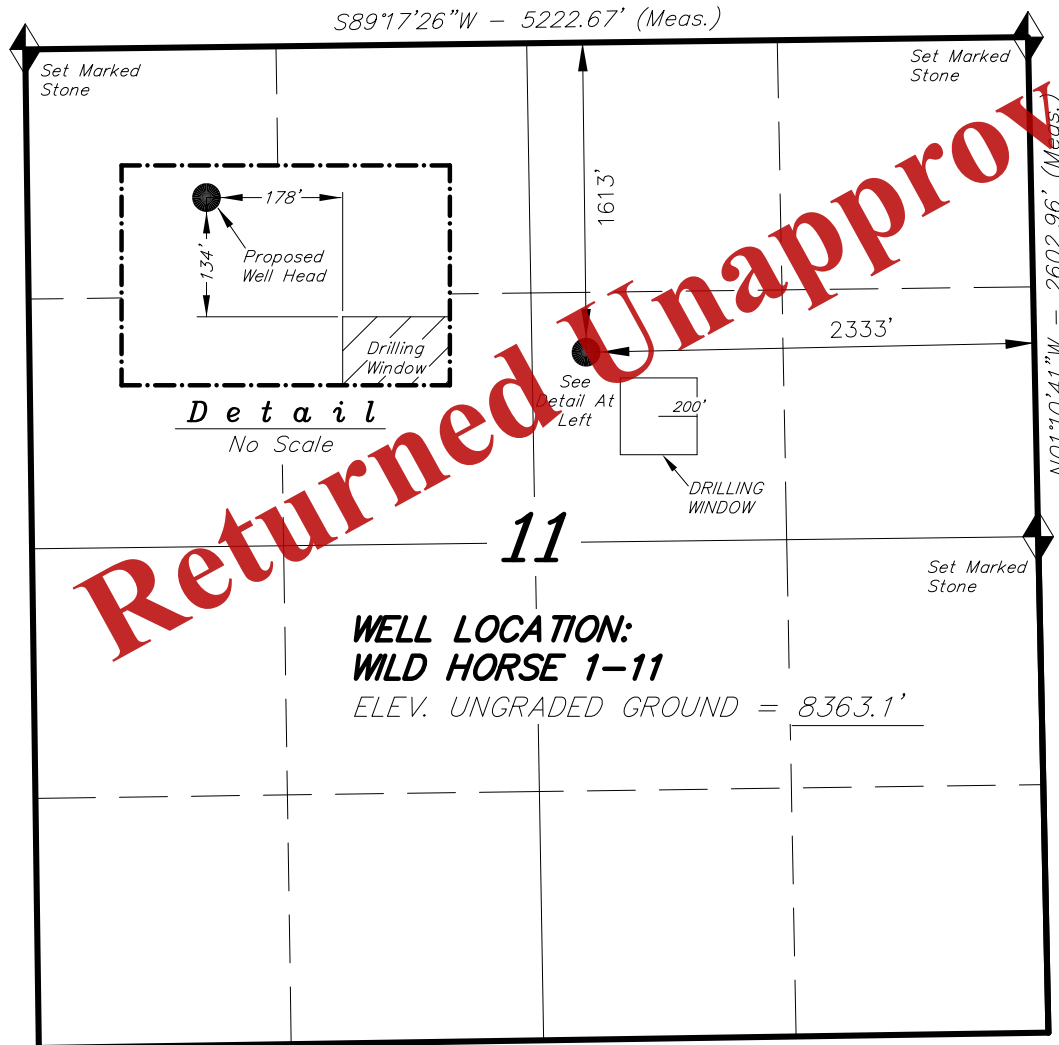
Actual BOP Stack Used May Vary in Some Details



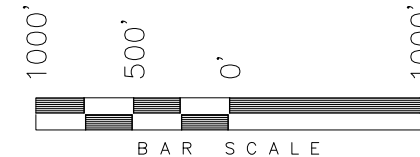
Installed BOP Stack Will Meet All Requirements of BLM Onshore Oil and Gas Order 2

T6S, R6W, U.S.B.&M.

VANTAGE ENERGY, LLC



WELL LOCATION, WILD HORSE 1-11,
LOCATED AS SHOWN IN THE SW 1/4 NE
1/4 OF SECTION 11, T6S, R6W,
U.S.B.&M. DUCHESNE COUNTY, UTAH.

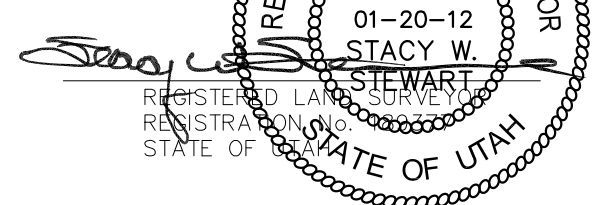


NOTES:

1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS
MADE BY ME OR UNDER MY SUPERVISION AND THAT
THE SAME ARE TRUE AND CORRECT TO THE BEST
OF MY KNOWLEDGE AND BELIEF.



◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; Elevations are base on an
N.G.S. OPUS Correction. LOCATION:
LAT. 39°58'55.06" LONG. 110°22'05.00"
(Tristate Aluminum Cap) Elev. 7307.99'

WILD HORSE 1-11
(Surface Location) NAD 83
LATITUDE = 39° 58' 37.29"
LONGITUDE = 110° 31' 34.11"

TRI STATE LAND SURVEYING & CONSULTING

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078
(435) 781-2501

DATE SURVEYED: 11-28-11	SURVEYED BY: S.H.
DATE DRAWN: 01-10-12	DRAWN BY: M.W.
REVISED:	SCALE: 1" = 1000'

Received: March 13, 2012

Map to Accompany
APPLICATION FOR PERMIT TO DRILL
Area Map

Vantage Energy Uinta LLC
Wild Horse 1-11
NW/4 NE/4 Sec. 11 T6S R6W
Duchesne County, Utah
Surface: Federal
Federal Mineral Lease: UTU78211
Sowers Canyon Unit: UTU86334X

LEGEND

- New Construction On Lease / In Unit (USFS)
- Two-Track to be Upgraded On Lease / In Unit (USFS)
- Existing Road On Lease / In Unit (USFS)
- Existing Road Off Lease / Off Unit (USFS)
- Existing Road (Ute Tribe)
- Water Haul

Revised by Banko Petroleum Management, Inc.

Access Road Map



Legend

- Existing Road
- 2 Track to be Upgraded
- Proposed Road

Tri State
Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501
F: (435) 781-2518



VANTAGE ENERGY, LLC

Wild Horse 1-11
SEC. 11, T6S, R6W, U.S.B.&M.
Duchesne County, UT.

DRAWN BY: D.C.R. REVISED:
DATE: 01-18-2012
SCALE: 1:100,000

TOPOGRAPHIC MAP







SHEET
A

Received: March 13, 2012

Map to Accompany
APPLICATION FOR PERMIT TO DRILL
Access Road

Vantage Energy Uinta LLC
Wild Horse 1-11
NW/4 NE/4 Sec. 11 T6S R6W
Duchesne County, Utah
Surface: Federal
Federal Mineral Lease: UTU78211
Sowers Canyon Unit: UTU86334X

LEGEND

-  New Construction On Lease / In Unit (USFS)
-  Two-Track to be Upgraded On Lease / In Unit (USFS)
-  Existing Road On Lease / In Unit (USFS)
-  Existing Road Off Lease / Off Unit (USFS)
-  Existing Road (Ute Tribe)
-  Water Haul




Revised by Banko Petroleum Management, Inc.

Access Road Map



Proposed Location
Wild Horse 1-11

Legend

-  Existing Road
-  2 Track to be Upgraded
-  Proposed Road



Tri State
Land Surveying, Inc.

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501
F: (435) 781-2518



VANTAGE ENERGY, LLC

Wild Horse 1-11
SEC. 11, T6S, R6W, U.S.B.&M.
Duchesne County, UT.

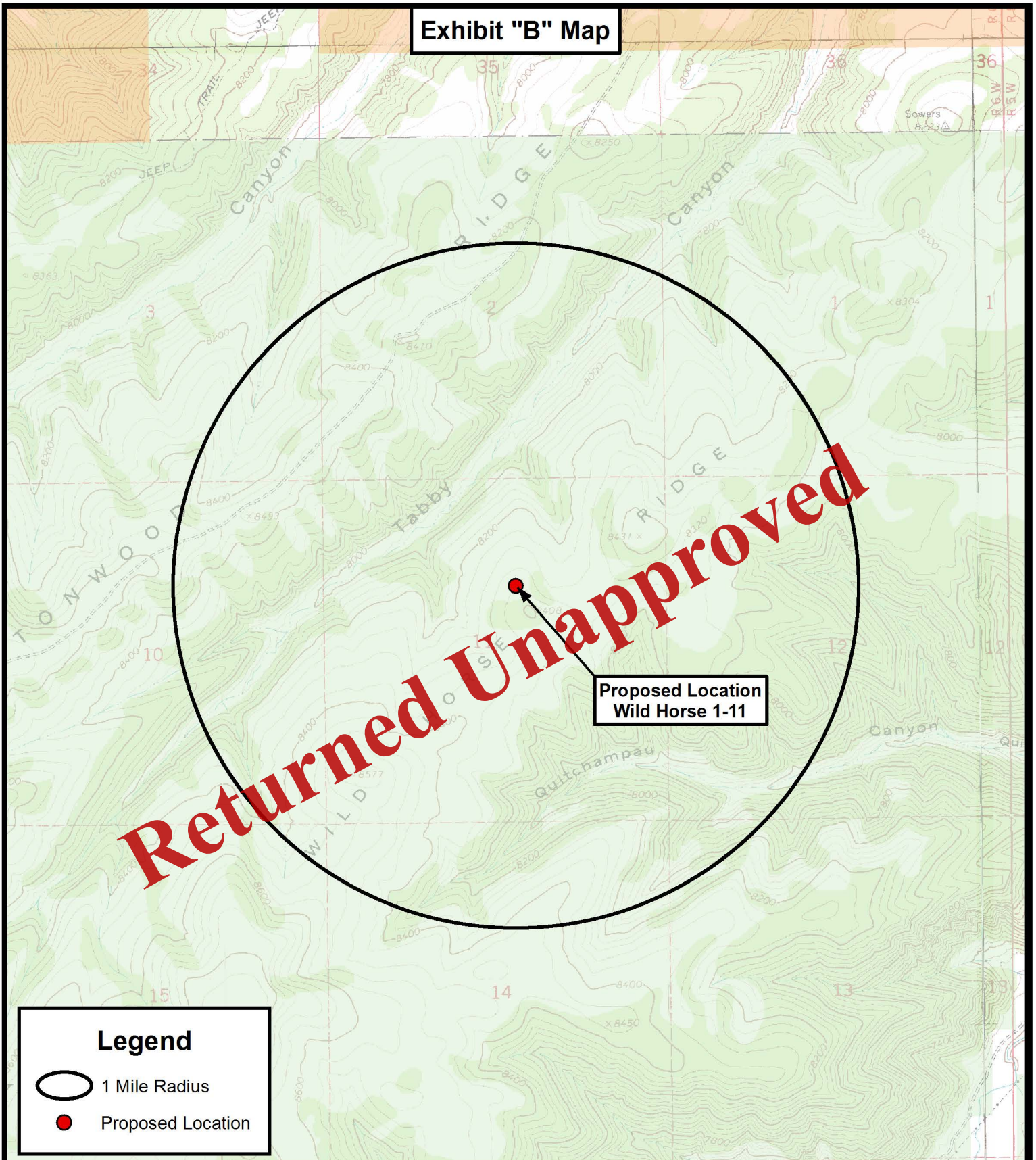
DRAWN BY: D.C.R. REVISED:
DATE: 01-18-2012
SCALE: 1" = 2,000'

TOPOGRAPHIC MAP

SHEET
B

Received: March 13, 2012

Exhibit "B" Map



Legend

- 1 Mile Radius
- Proposed Location

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SEC. 11, T6S, R6W, U.S.B.&M.
Duchesne County, UT.

DRAWN BY: D.C.R. REVISED:
DATE: 01-18-2012
SCALE: 1" = 2,000'

TOPOGRAPHIC MAP

SHEET
D

Received: March 13, 2012

Vantage Energy Uinta LLC
Wild Horse 1-11
SHL: 1,613' FNL 2,333' FEL (NW/4 NE/4)
Sec. 11 T6S R6W
Duchesne County, Utah
Surface: Federal
Federal Mineral Lease: UTU78211

SURFACE USE PLAN OF OPERATIONS

This Surface Use Plan of Operations (SUPO) is submitted to comply with Bureau of Land Management (BLM) *Onshore Oil and Gas Order 1: Approval of Operations*, under authority prescribed in 43 CFR 3160. Construction specifications are per BLM and U.S. Forest Service *Surface Operating Standards for Oil and Gas Exploration and Development (Gold Book)*, Fourth Edition, 2007.

This Application for Permit to Drill (APD) is being filed under the APD process as stated per Onshore Order No. 1 (OSO #1) and supporting Bureau of Land Management (BLM) documents.

THIS APD ALSO SERVES AS THE NOTICE OF STAKING PER OSO #1.

A) EXISTING ROADS

Access to the proposed location using existing roads begins in Bridgeland, Utah. Start at the intersection of East River Road and Highway 40 in Bridger, Utah. Proceed ± 2.3 miles on to Antelope Canyon Road. Travel south on Antelope Canyon Road, which turns into Sowers Canyon Road, for ± 14.7 miles to a Y. At the Y of Sowers Canyon Road and Forest Road 491, veer right onto Forest Road 491. Travel southwest for ± 3 miles to a Y in the road. Continue southwest on Forest Road 491 for ± 6.5 miles to the proposed stated access road. Travel $\pm 1,079'$ to well Wild Horse 1-11.

Operator has established the Sowers Canyon Unit, Serial Register No. UTU 86334X, effective August 4, 2008. Use of existing roads within the federal unit would not require a federal Right-of-Way (ROW)/Forest Service Special Use Permit. Use of roads on National Forest lands outside the federal unit would require grant of a federal ROW.

Existing roads will be maintained to current or better standards, but no maintenance actions and no vehicle passage will be taken outside of the existing roads disturbance.

On- and off-unit existing road lengths by surface owner from the location are indicated in **Table 1**.

Table 1 - Existing Road Lengths by Surface Owner

Location	Unit Status	Surface Owner	Road Length (miles)
T6S, R6W USBM	Within Unit UTU 86249X	United States Forest Service	± 2.17 miles
Sections: 6,31,29,28,21, 22, 23, 14, 13, 12 T5S, R5W USBM	Outside Unit	Uintah and Ouray Ute Indian Tribe	± 8.7 miles
Remaining County and non-County Roads to Bridgeland	Outside Unit	Public	± 13.0 miles
Location to Bridgeland, Utah approximately 24 miles			

B) ACCESS ROADS TO BE CONSTRUCTED OR RECONSTRUCTED

Forest Road 471 is located immediately adjacent to the proposed location. Reconstruction of this road would likely be limited to spot application of gravel, as necessary. From Forest Road 491, a well pad access road ±1,079' long would be constructed. The proposed road would utilize an 18-foot running surface with, in most cases, two feet of drainage control structures on either side and will meet the requirements of Forest Service collector class roads.

The access will be constructed to a temporary standard that will allow safe passage of oilfield truck traffic within the duration of this well. Reconstruction may include ditching, drainage, graveling, crowning, and capping the roadbed to the minimum extent necessary to provide a well-constructed safe all-weather road. Construction will not be allowed during muddy conditions. Travel on the primary access road will not be permitted. If materials other than native materials found on the well pad were needed to reconstruct the road, Operator would obtain materials from permitted sources located off the Forest. Construction materials would not be removed from USFS lands.

The reconstructed and well pad access roads will not cross any drainages.

Available topsoil will be removed to a depth of six inches, or whatever is available, and windrowed along either side of the road alignment. Topsoil will be stored separately from subsoil. Topsoil stockpiled for more than 10 months will be stabilized with a cover crop. Removed soil and overburden will be stored so as to be available for reclamation purposes. No removed soil or overburden will be pushed into drainages or stored where transport into drainages could occur. Silt fencing or similar control measures will be used where necessary to prevent sediment transport. Following construction, topsoil will be evenly re-spread over the road embankment and any borrow ditch slopes. Equipment will be limited to that appropriate to the scale and scope required for construction.

Intervisible turnouts will be placed, if required, to permit safe operations. There are no grades present greater than 8% along this access. No culverts, bridges, or major cuts and fills will be

required. No gates, cattleguards, or fences will be required. Operator will be responsible for all maintenance on any existing cattleguards, or gates associated with this oil and/or gas operation.

Design speed for the road is 25 mph. The qualified construction supervisor shall be an engineer, company superintendent or other representative who is competent and knowledgeable in oilfield road and drill site construction, and able to speak for the operator. The dirt contractor, or drilling/completion foreman whose primary expertise is not in construction, do not qualify as construction superintendents.

C) LOCATION OF EXISTING WELLS WITHIN A ONE MILE RADIUS OF THE PROPOSED WELL

As of February 2012 there are no identified water wells located within one mile of the proposed location, according to the Utah Division of Water Rights. Existing oil or gas wells located within one mile of the proposed well are illustrated in **Sheet D and Petro Wells within a 1-Mile Radius Table**.

D) LOCATIONS OF EXISTING AND/OR PROPOSED FACILITIES IF WELL IS PRODUCTIVE

The dimension of the proposed well pad is indicated in the attached location diagrams. (See **Location Layout and Cross Sections**). The total disturbed area, including topsoil piles and access road, is ± 5.0 acres. The well pad will be of a minimum size sufficient to conduct safe operations. Cuts/fills will be reduced to 3:1 or shallower.

If the well is successful, production equipment on location may include a wellhead, natural gas-fired or propane powered pumping unit, separator/heater-treater, meter house, propane fuel tank, and two or more storage tanks, of up to 400 barrel capacity, for storage of produced oil and water.

Gas will be transported from the well production facility through a pipeline which will be separately permitted and the pipeline does not constitute a part of this application. Fluids encountered during well testing will be discharged to a swab tank. The characteristics of Green River oils in the vicinity suggest that oil storage tanks would likely require heating using gas-fired heaters supplied by casinghead gas or propane. Additional variable-sized containers of fuel oil, methanol, or other chemicals required for production may be stored on location.

Site preparation will be done using standard construction equipment. All above ground structures will be painted a color specified by USFS to minimize visual contrast with the landscape. The actual equipment and facilities to be installed will depend upon the results of production testing and will be authorized by Sundry Notice.

Electrical power transmission lines are not proposed at this time. Electrical transmission lines may be brought into the location in the future. A right-of-way grant application will be filed with USFS and BIA, as required, and a right-of-way granted prior to construction of any electrical transmission lines.

Produced water will be trucked from the location to an approved disposal facility as required. The final disposal method will be selected following a determination of actual projected water volumes. Liquid hydrocarbons will be trucked off-site for sale. The frequency of produced water disposal and liquid hydrocarbon retrieval truck trips will be determined following onset of production.

The traveled portion of the production site will be covered with gravel as necessary for all-weather access following installation of production facilities, if the well is successful.

During well completion and testing, produced water may be temporarily discharged to the lined reserve pit in compliance with specifications included in *Onshore Oil and Gas Order 7*. In the event of any hydrocarbon presence in the reserve pit, it will be netted adequately to prevent entry by birds.

D) LOCATION AND TYPE OF WATER SUPPLY

Water supply will be from the Ouray Municipal Water Plant at Ouray, Utah, and/or Target Trucking Inc.'s water source in the SW/SW, Sec. 35, T9S, R22E, Uintah County, than (State Water Right #49-1501). Water will be hauled by a licensed trucking company over the access roads described above. Should a different source be used, notification would be made by Sundry Notice.

Water of salinity levels less than 15,000 mg/liter will be used for drilling and cementing. Mixing of cement is anticipated to use approximately 150 bbls (6,200 gallons) of water. Preparation of drilling fluids is anticipated to use approximately 5,000 bbls (210,000 gallons) of water and an additional 5,500 bbls (231,000 gallons) would be used during completion operations. Truck transport of water supplies is estimated to require approximately 107 truckloads, assuming a 100 bbl. capacity truck.

E) SOURCE OF CONSTRUCTION MATERIALS

Surface disturbance will be minimized to the extent feasible. Construction materials will consist of native materials from borrow areas. Surfacing materials will be obtained from local permitted sources, where required. No construction materials will be taken from Federal and/or Indian lands without prior approval from the appropriate Surface Management Agency.

Transportation of construction materials will not require additional access roads.

F) METHODS FOR HANDLING WASTE DISPOSAL

Wastes

A reserve pit will be excavated in such a manner as to avoid the collection of surface runoff. The reserve pit will be used to contain drilling fluids, which may include 2-3% KCL fluid, bentonite, polymer, and biodegradable soap, and will serve as the disposal site for cuttings following completion of the well. Leftover drilling mud will be disposed in the pit. No trash will be disposed in the reserve pit. The reserve pit will be constructed so as not to leak, break, or allow discharge. If the reserve pit requires padding prior to lining (due to rocky conditions) felt padding will be used. The reserve pit will be lined with a plastic liner of minimum 12 mil thickness.

In the event of production of liquid hydrocarbons, the produced liquids would be contained in above-ground on-site storage tanks. Such tanks would be surrounded by berms of sufficient area and height to contain 120 % of the volume of the largest tank. All load lines and valves would be placed inside the containment.

Human waste will be stored in portable, self-contained chemical toilets. Toilet holding tanks will be pumped out as required, or following well completion. Disposal of human wastes will be at the Roosevelt sewage disposal plant or another approved sewage facility and in compliance with applicable rules and regulations of the Utah Department of Environmental Quality (UDEQ).

Trash and other solid waste (including cans, paper, cable, etc.) will be contained in portable trashcans or barrels. The trash will be disposed of at the Duchesne County Landfill or at another UDEQ-approved sanitary landfill as needed or upon completion of operations. Disposal of used motor oil or other hydrocarbon products stored in closed containers will be done at an approved disposal facility. No burning of trash will be permitted.

Cleanup and removal from the location of all trash, debris, and other waste materials will be done immediately following drilling and completion operations.

Produced Water

Produced wastewater and/or completion flowback water will be confined to the lined reserve pit, in compliance with direction provided in *Onshore Oil and Gas Order 7*, or storage tank for a period not to exceed 90 days after initial production. After the 90-day period, the produced water will be disposed of at an authorized disposal site. The tank, if used, would be removed from the location as soon as practicable after the water is transported from the location.

Hazardous Materials

Operator and its contractors shall ensure that all use, production, storage, transport, and disposal of hazardous and extremely hazardous materials associated with the drilling, completion, and production of wells and project operations will be in accordance with all applicable existing or hereafter promulgated federal, state and local government rules, regulations, and guidelines.

Hazardous materials will be stored in an off-site facility located on private surface and transported to the well location only as needed. Potentially hazardous materials will not be left at the proposed well locations. Transport of hazardous substances will be in compliance with applicable regulations of the U.S. Department of Transportation (DOT) as codified in 49 CFR 100 *et seq.* Any release of hazardous substances in excess of reportable quantities as established in 40 CFR, Part 117 will be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended. A copy of the report will also be furnished to the Authorized Officer (AO) and all other appropriate federal and state agencies.

Operator will maintain a file of current Material Safety Data Sheets (MSDS) for all chemicals, compound, or substances used in the production process. MSDSs for such materials used by subcontractors during drilling, construction, and completion operations are the responsibility of the subcontractors as indicated in the Emergency Planning and Community Right to Know Act (42 USC Chapter 116) (EPCRA). Operator will require that subcontractors maintain those MSDSs for which they are responsible and will notify all Project staff and subcontractors of the locations of these data sheets.

A listing of potentially hazardous materials which Operator or its subcontractors anticipate may be present during drilling, completion, and production operations is indicated in **Table 3**.

Table 3 - Potential Hazardous Materials List

Hazardous Material	Purpose
Diesel	Fuel
Gasoline (unleaded)	Fuel
Grease	Equipment lubrication
Engine oil	Engine lubrication
Ethylene glycol	Engine coolant
Cement	Cementing casing in hole
Calcium chloride	Cement additive
Hydraulic fluid	Hydraulic equipment
Acetylene	Fuel for torch
Propane	Fuel for living quarters
Methanol	De-icing of gas and water lines
Liquid polymer	Drilling mud flocculating agent
Bentonite gel	Drilling mud viscosity agent
Diammonium Phosphate	Drilling mud shale inhibition agent
Caustic Soda	Drilling mud pH control
Pipe joint compound (no lead)	Pipe thread lubrication
Pipe thread compound (no lead)	Pipe thread sealant

G) ANCILLARY FACILITIES

No ancillary facilities are proposed. Should additional facilities be required in the future, they would be permitted by submittal of a Sundry Notice.

H) WELLSITE LAYOUT

The wellsite layout for the proposed well is indicated the **Location Layout diagram**. Cut/fill diagrams are indicated in **Well Pad Cross Sections diagram**. A maximum of 11.9 feet of cut and 10.5 feet of fill is proposed. Total cut is estimated at 19,080 cubic yards and total fill is estimated at 16,120 cubic yards.

Construction will not commence during times when soils are saturated or when damage to adjacent watersheds could occur. Construction will not use frozen materials.

To the extent feasible, surface vegetation will be cleared by mowing, raking, and burning in preference to scraping to facilitate reclamation potential. Good topsoil, to a depth of six inches or as much as is available, will be segregated from subsoils and from cut areas for use in reclamation.

Permanent living facilities are not planned. One or more temporary portable trailers will be used by the drilling supervisor and other rig personnel and may be manned 24 hours daily.

Reserve Pit

A rectangular reserve pit of approximately 75 feet width by 140 feet length by 10 feet deep. A minimum of one half of the total depth of the pit at its deepest point will be below original ground surface. A minimum of two feet of freeboard will be maintained at all times for a maximum working pit capacity of 10,790 bbls. The pit will be lined with a liner of minimum thickness 12 mils. Pit fluids will be limited to 2-3% KCL fluid, bentonite, polymer, and biodegradable soap, and possibly short-term storage of produced water in compliance with provisions of *Onshore Oil and Gas Order 7*.

The flare pit will be located a minimum of 100 feet from the well head. The position of the flare pit and layout of flare lines will be in compliance with *Onshore Oil and Gas Order 2*.

Operator requests a variance to *Onshore Oil and Gas Order 2, Item E*, regulations for air/gas drilling operations. Operator plans to drill only the surface hole to a depth of 350' with a "spud rig", in a separate operation from the drilling rig. No hydrocarbons are present in the surface hole section and therefore, "gas" drilling is not applicable to this hole section. Therefore, for the purpose only of drilling the surface hole with an air rig, Operator requests the following four (4) variances from the order that states "...the following equipment shall be in place and operational during air/gas drilling: (1) properly lubricated and maintained rotating head; (2) blooie line discharge one hundred feet (100') from wellbore; (3) automatic igniter or continuous pilot light on the blooie line; and (4) compressor located...a minimum of 100 feet (100') from the wellbore".

- a. Operator requests approval to use a diverter bowl rather than a rotating head as specified in the Order. The diverter bowl forces air and cuttings to the reserve pit and is only used to drill the surface hole (to a total depth of 300'). The surface hole section is non-hydrocarbon bearing, and therefore formation pressures will not require a pressure rated rotating head. Should water flows be encountered, they will be reported to the appropriate agencies.
- b. Operator requests approval to use a blooie line with a discharge length of less than the required one hundred feet (100') from the wellbore in order to minimize the well pad size, and to direct the cuttings into the reserve pit. The wellbore is to be located approximately thirty-five feet (35') from the reserve pit which is to be seventy feet (70') wide. Therefore, a one hundred foot (100') blooie line would blow cuttings across the reserve pit. The requested length of blooie line to drill the surface hole is thirty-five feet (35'). This is the distance necessary to reach the edge of the reserve pit, and to therefore direct cuttings into the reserve pit in a safe and efficient manner.
- c. Operator requests approval to operate without an automatic igniter or continuous pilot light on the blooie line. The surface hole section is non-hydrocarbon bearing and therefore does not require a continuous ignition source.
- d. Operator requests approval to use a trailer mounted air compressor located less than one hundred feet (100') from the wellbore in order to minimize the location size. The compressor will be located fifty feet (50') from the wellbore in an opposite direction of the blooie line. The compressor has the following safety features: (1) shut-off valve on the trailer located approximately fifteen feet (15') from the air rig; (2) pressure relief valve on the compressor; and (3) spark arrestors on the motors. The compressor will only be used for the drilling of the surface hole, which is non-hydrocarbon bearing.

Fencing

To protect stock and wildlife, the pit will be fenced on three sides during drilling operations and on all sides after drilling operations prior to reclamation.

Posts will be firmly set in the ground in cement or braced to maintain the fencing tight and fencing will be set back at least two feet from the edge of the pit. Maximum distance between any two posts shall be no greater than 16 feet. Thirty-nine inch net wire shall be used with at least one strand of barbed wire on top of the net wire. (Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence). The net wire shall be no more than 2 inches above the ground. The barbed wire strand shall be 3 inches above the net wire. Total height of the fence shall be at least 42 inches. All wire shall be stretched by using a stretching device before it is attached to the corner posts. Fencing will be maintained in good condition until the pit is closed. Electric fencing will not be used.

Any existing fences to be crossed by the access road shall be braced and tied off before cutting so as to prevent slacking of the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and, upon completion of construction, the fence shall be repaired to USFS specifications. Prior to crossing any fence located on Federal land, or any fence between Federal land and private land, the operator will contact the USFS, who will in turn contact the grazing permittee or owner of said fence and offer him/her the opportunity to be present when the fence is cut in order to satisfy himself/herself that the fence is adequately braced and tied off.

I) PLANS FOR RECLAMATION OF THE SURFACE

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, and trash not required for production. Any hydrocarbons in the pit will be removed in accordance with 43 CFR 3162.7-1. Interim reclamation will be performed on all areas of the access road and well pad not needed after drilling and completion operations (if performed) are finished.

Rat and mouse holes will be filled and compacted from bottom to top immediately after release of the drilling rig from the location.

Reserve Pit

Fluids in the reserve pit will be allowed to dry through evaporation. Drill cuttings and mud will remain in the pit. The pit contents will not be squeezed. In the event the pit is slow to dry, alternate methods of drying, fluid removal, or other treatment will be employed. There will be no discharge of pit fluids to the surface. Following drying of the pit contents, cuttings and the remnants of the drilling mud will be buried beneath a minimum of three feet of earth. The plastic liner will be torn or perforated prior to burial to preclude accumulation of precipitation and no portion of the liner will remain above ground.

Surface Reclamation

Rehabilitation will commence as directed by the Forest Service following completion of testing and evaluation of the well. Areas not required for production will be recontoured and landscaped to approximate the original topography and cover as closely as practical, consistent with safety considerations and ongoing operations. Removed topsoil will be distributed evenly over the

reclaimed surface and seeded with a grass seed mixture approved by the Authorized Officer (AO). Following well abandonment, the access road will be reclaimed in a manner similar to that used for the well pad.

Soil materials will be stockpiled for 10 months or longer and be stabilized and signed. Such stockpiles will be seeded with a cover crop and at rates to be designated by the USFS. Topsoil and subsoil will be stored in separate locations and appropriately identified.

During reclamation of the site, the subsoil fill material will be pushed back into the cuts and up over the back slope. No depressions will be left to trap surface runoff. Spreading will not be done when the ground or topsoil is frozen or wet.

Well production personnel will be equipped with illustrated information regarding potential noxious weeds or invasive species of concern in the area. Prior to completion of reclamation and bond release, the well pad and access road will be monitored at least quarterly during the growth season for the presence of weeds. Control of weeds will be done by an approved contractor in conformance with control measures approved by the AO.

Notice of Intent to Abandon will be filed with the BLM for final recommendations for surface reclamation.

Reseeding

Reseeding will be per specifications of the USFS. A recommended seed mix and required seed amounts for the proposed well will be obtained from the AO.

The site may be ripped or otherwise scarified up to a maximum depth of 18" on 24" centers to prepare a rough seeded and eliminate compacted soils. The objective is to leave an extremely rough surface for maximum snow and rainfall retention, as well as ridges to protect the surface from wind erosion.

All disturbed, unused areas will be seeded using a drill equipped with a depth regulator. All seed will be drilled on the contour. The seed will be planted between one-quarter and one-half inch deep. Where drilling is not possible (i.e., too steep or rocky), the seed will be broadcast and the area raked or chained to cover the seed. If the seed mixture is broadcast, the rate will be doubled. The certified or registered seed mixture and application rates will be obtained from the AO.

Seeding will be done either in late autumn (September 1 to November 15, before freeze up) after completion or as early as possible the following spring to take advantage of available ground moisture. The seeding shall be repeated until a satisfactory stand, as determined by the AO, is obtained. The first evaluation of growth will be made following completion of the first growing season after seeding.

Mulching or other measures will be applied to hold topsoil and hasten seed establishment on extremely steep slopes (greater than 30%).

When purchasing seed, the operator will notify the USFS so purchased seed may be inspected for pure live seed (PLS) certification.

Other reclamation requirements may be added by the USFS as Conditions of Approval to the APD.

Final Abandonment

Prior to final abandonment reclamation work, a sundry notice describing the proposed reclamation plan will be submitted to the AO for approval.

J) SURFACE OWNERSHIP

Surface ownership of areas which will be disturbed by construction of the proposed well, access roads, or associated facilities is indicated in **Table 4**.

Table 4 - Ownership of Surface to be Disturbed by Proposed Well and Facilities

Owner	Address	Telephone
U.S. Forest Service Duchesne Ranger District	85 W. Main St. Duchesne, UT 84021	Office: 435-738-2482 Fax: 435-781-5215

Operator certifies that it has made good faith efforts to notify surface owners prior to entry onto their lands and that it has obtained, or has made a good faith effort to obtain a Surface Use Agreement with all private surface owners. Operator certifies that it has provided a copy of this Surface Use Plan of Operations to all private surface owners.

K) OTHER INFORMATION

Cultural resources surveys were performed by Montgomery Archaeological Consultants and reports were previously forwarded to the Ashley NF. A SHPO concurrence letter, dated August 19, 2010 was also included.

Monitoring of well pad construction by a qualified paleontologist will be done at the direction of the USFS, as required.

Operator will inform all persons in the area who are associated with this project that they are subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials, human remains, or vertebrate fossils are uncovered during construction, the Operator will immediately stop work that might further disturb such materials, and contact the AO. Within five working days the AO will inform the operator as to:

1. Whether the materials appear eligible for the National Register of Historic Places;
2. The mitigation measures the operator will likely have to undertake before the site can be used;
3. A time frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer; and
4. That the findings of the AO are correct and that mitigation is appropriate.

If the Operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever

recordation and stabilization of the exposed materials that may be required. Otherwise, the Operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that required mitigation has been completed, the operator will then be allowed to resume construction.

Operator will control noxious weeds along ROWs for roads, well sites, or other applicable facilities. A list of noxious weeds will be obtained from the USFS, or the appropriate County Extension Office. On USFS-administered land, a Pesticide Use Proposal shall be submitted, and given approval, prior to the application of herbicides or other pesticides or possible hazardous chemicals.

The drilling rig and ancillary equipment will be removed from the location prior to commencement of completion operations. Completion operations will be conducted using a completion/workover rig.

A Storm Water Pollution Prevention Plan is being prepared for this project and a copy will be separately submitted to the USFS.

There are no occupied surface dwellings located within one mile of the proposed well.

ATTACHMENTS

- Access Road Map
- Area Map
- Proposed Pipeline Map
- Location of Wells within 1 mile of the Proposed Well (Sheet D)
- Petro Wells within 1 mile radius table
- Rig Layout
- Location Layout
- Conceptual Production Layout
- Well Pad Cross Sections

Vantage Energy Uinta LLC
Wild Horse 1-11
1,613' FNL 2,333' FEL (SW/4 NE/4)
Sec. 11 T6S R6W
Duchesne County, Utah
Surface: Federal
Federal Mineral Lease: UTU78211
Sowers Canyon Unit: UTU86334X

APPLICATION FOR PERMIT TO DRILL
OPERATOR CERTIFICATION

LESSEE'S OR OPERATOR'S REPRESENTATIVE:

Operator

Corporate Office

Vantage Energy, LLC
116 Inverness Drive East, Suite 107
Englewood, CO 80112
Phone: 303-386-8600
Fax: 303-386-8705

Michael Holland – Senior Landman
John Moran – Vice President Operations

Field Office

Vantage Energy, LLC
116 Inverness Drive East, Suite 107
Englewood, CO 80112
Phone: 303-386-8600
Fax: 303-386-8705

Permit Agent

Banko Petroleum Management, Inc.
385 Inverness Parkway, Suite 420
Englewood, Colorado 80112-5849
Phone: 303-820-4480
Fax: 303-820-4124

+ David Banko – Consulting Petro Engineer
david@banko1.com
Kim Rodell – Regulatory Project Manager
kim@banko1.com

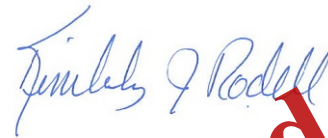
+ For any questions or comments regarding this permit.

OPERATOR CERTIFICATION:

I hereby certify that Vantage Energy Uinta LLC and its contractors and sub-contractors are responsible for the operations conducted under this application subject to the terms and conditions of the mineral lease. Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Vantage Energy Uinta LLC under their nationwide bond, BLM Bond No. UTB000288.

I hereby certify that I, or someone under my direct supervision, have inspected the drillsite and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

March 1, 2012



Kimberly J. Rodell
Permit Agent for Vantage Energy Uinta LLC

Returned Unapproved

Pad Location: SWNE Section 11, T6S, R6W, U.S.B.&M.



Tri State (435) 781-2501
Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

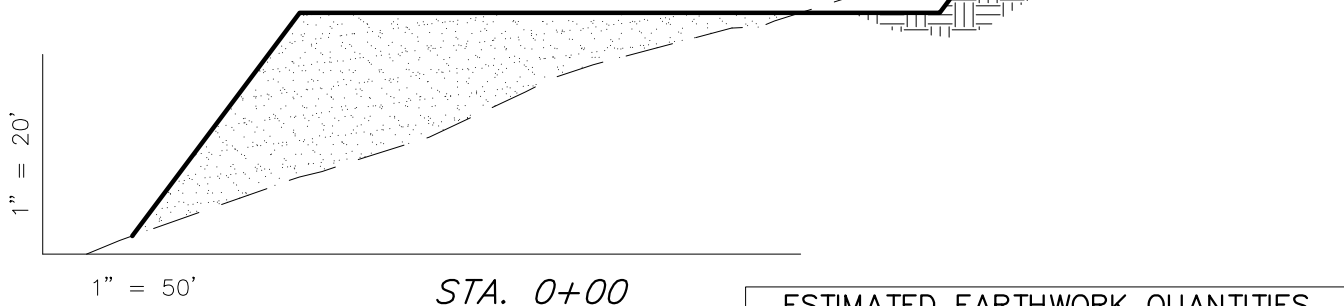
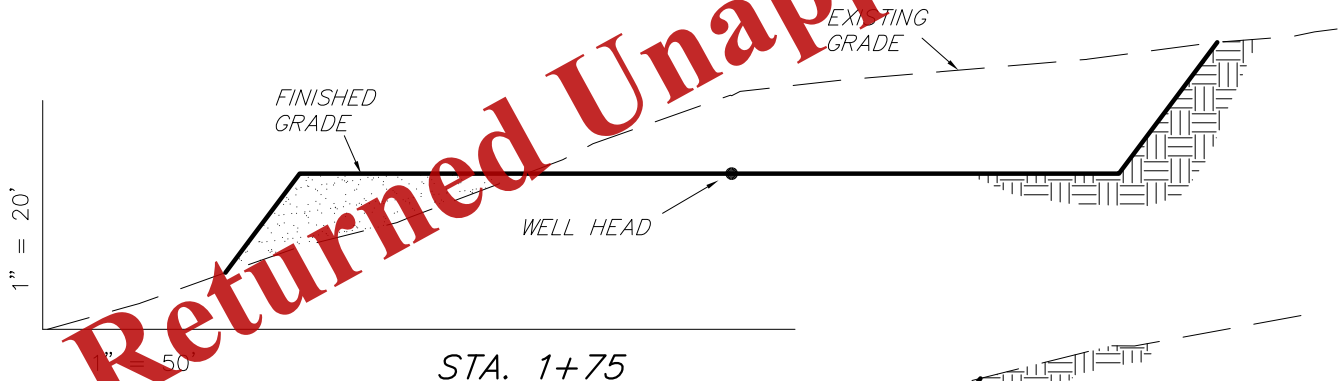
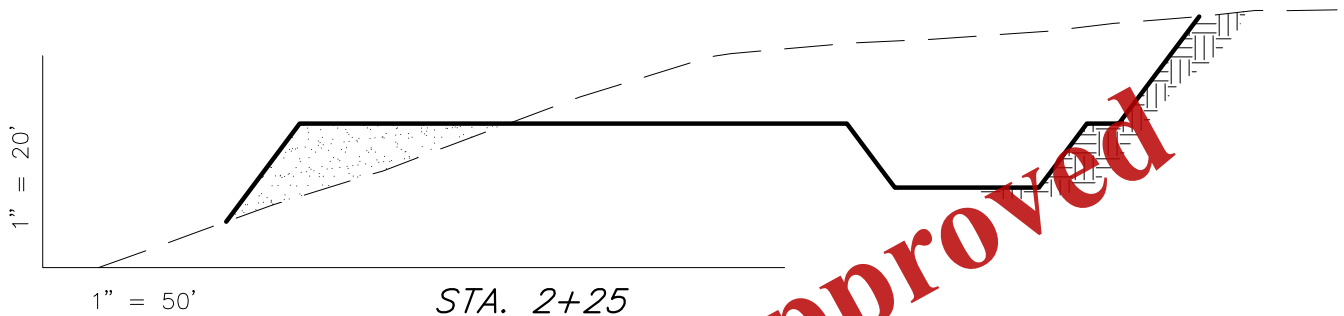
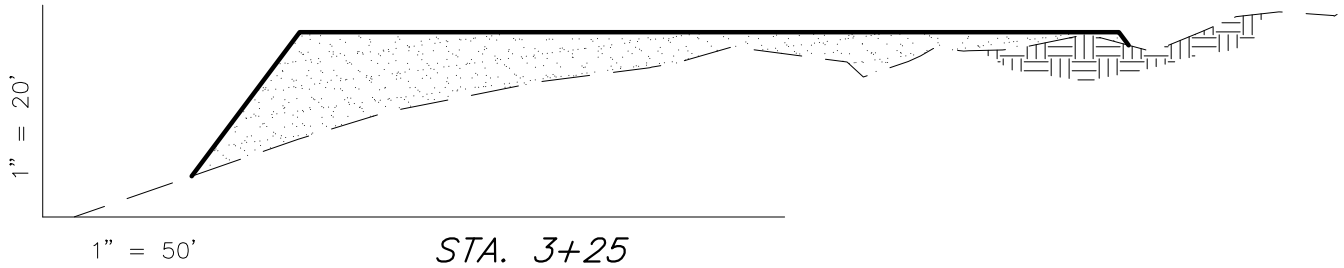
Received: March 13, 2012

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CROSS SECTIONS

WILD HORSE 1-11

Pad Location: SWNE Section 11, T6S, R6W, U.S.B.&M.



NOTE:
UNLESS OTHERWISE
NOTED ALL CUT/FILL
SLOPES ARE AT 1.5:1

ESTIMATED EARTHWORK QUANTITIES (No Shrink or swell adjustments have been used) (Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	16,120	16,120	Topsoil is not included in Pad Cut	0
PIT	2,960	0		2,960
TOTALS	19,080	16,120	2,220	2,960

SURVEYED BY: S.H.	DATE SURVEYED: 11-28-11
DRAWN BY: M.W.	DATE DRAWN: 01-10-12
SCALE: 1" = 60'	REVISED:

Tri State
Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078
(435) 781-2501

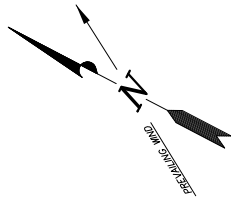
Received: March 13, 2012

VANTAGE ENERGY, LLC

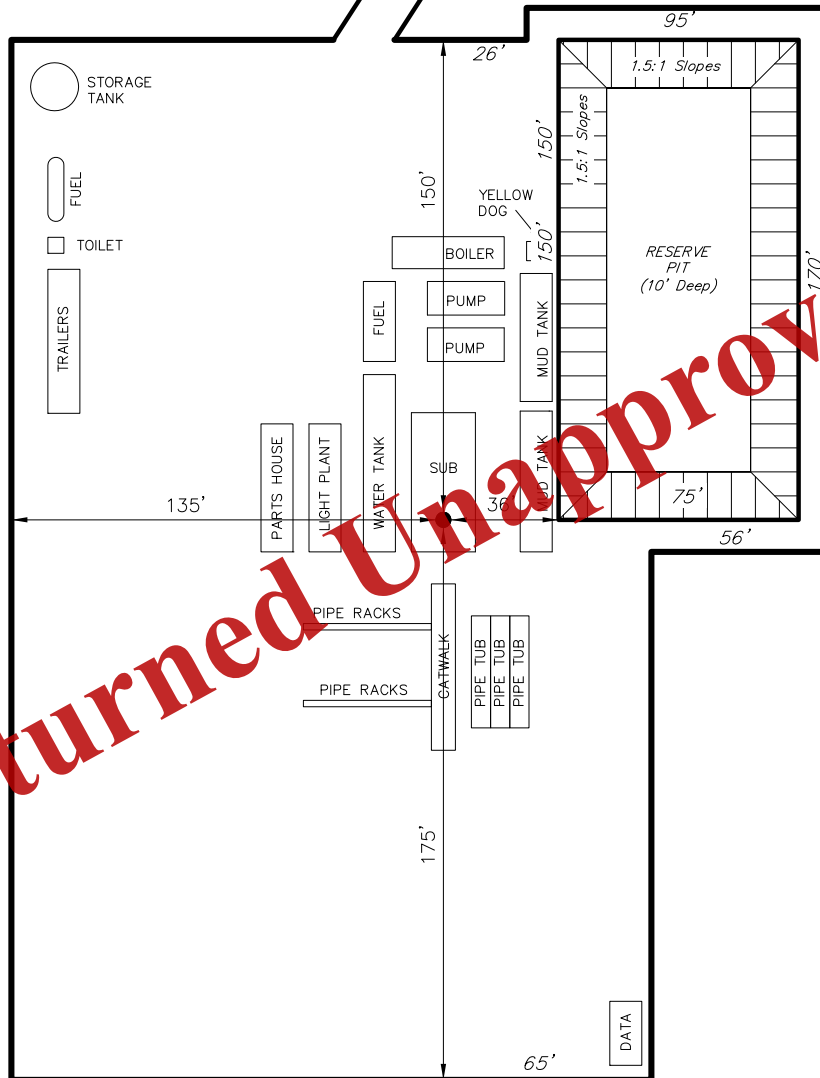
TYPICAL RIG LAYOUT

WILD HORSE 1-11

Pad Location: SWNE Section 11, T6S, R6W, U.S.B.&M.



PROPOSED ACCESS
ROAD (Max. 6% Grade)



SURVEYED BY: S.H.

DATE SURVEYED: 11-28-11

DRAWN BY: M.W.

DATE DRAWN: 01-10-12

SCALE: 1" = 60'

REVISED:

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Received: March 13, 2012



GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

March 15, 2012

VANTAGE ENERGY UINTA LLC
116 Inverness Drive East, Ste 107
Englewood , CO 80112

Re: Application for Permit to Drill - UINTAH County, Utah

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the Wild Horse 1-11 well, API 43047524370000 that was submitted March 13, 2012 is being returned unapproved. If you plan on drilling this well in the future, you must first submit a new application.

Should you have any questions regarding this matter, please call me at (801) 538-5312.

Sincerely,

Diana Mason
Environmental Scientist

Enclosure

cc: Bureau of Land Management, Vernal, Utah